

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8685
Exam Date: 07/13/2001

1. Current Owner:
NORTHWEST FARM CREDIT SERVICES FLCA 815 N COLLEGE RD TWIN FALLS ID 83301-3484
ROTH INVESTMENTS LLC 539 S 800 E JEROME ID 83338
2. Accompanied by: See Narrative
Phone No: (208) 280-3452
Address: 1126 US HWY 26, Bliss ID 83314
Relationship to permit Holder: Paul Matheson, current feedlot manager for Roth Investments LLC

3. SOURCE:
GROUND WATER

Method of Determination: On-site inspection

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
37-12278	GROUND WATER	STOCKWATER	Decree
37-12279	GROUND WATER	STOCKWATER/DOMESTIC	Decree

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
37-12278	GROUND WATER	STOCKWATER	Decree
37-12279	GROUND WATER	STOCKWATER/DOMESTIC	Decree

Comments: There are three wells on this stockwater system and this water right has been amended to add the two wells in the SESE1/4 of Twp 06S, Rge 13E, Sec. 1, that also deliver the stockwater water rights listed above as they are all part of the same delivery system and place of use.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SW¼ SE¼, Sec. 1, Twp 06S, Rge 13E, B.M. GOODING County
GROUND WATER SE¼ SE¼, Sec. 1, Twp 06S, Rge 13E, B.M. GOODING County
GROUND WATER SE¼ SE¼, Sec. 1, Twp 06S, Rge 13E, B.M. GOODING County

Method of Determination: On-site inspection.

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06S	13E	1												X			X	X	

Method of Determination: On-site inspection.

3.

X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

X Aerial Photo Attached (required for irrigation of 10+ acres).

X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
WMIS #401696 A0002793	Franklin	5	2343177004		
WMIS #400071 A0011443	Franklin	5	2343178304	Grundfos	40550-12
WMIS #401690 D0023154		5			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Ultrasonic	Portaflow	Fuji	FLCS1011	7K0085TB		

2. Measurements: From WMIS Records measurements performed by Cindy Yenter:
 Well #1 (37-12279); WMIS 401696: 28.80 gpm (0.06 cfs) measured on 9/28/2006
 Well #2 (37-12278); WMIS 400071: 41.00 gpm (0.09 cfs) measured on 10/4/2000
 Well #3 (37-8685); WMIS 401690: 51.00 gpm (0.11 cfs) measured on 10/4/2000
 System total 0.06 cfs + 0.09 cfs + 0.11 cfs = **0.26 cfs**

E. FLOW CALCULATIONS – N/A

_____ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$

$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$

2. Volume Calculations for Other Uses: Dairy Spreadsheet was used to calculate volume based on current cow numbers

(4500 cows at approximately 10 - 12 months of age), and the resulting volume was 33.7 afa. However, actual stockwater volume will be based on volumes collected and reported in the WMIS database.

From 2008 which has the highest overall volume of years reported:

Well #1 (37-12279); WMIS 401696: 6.3 af

Well #2 (37-12278); WMIS 400071: 39.27 af

Well#3 (37-8685); WMIS 401690: 43.8 af

Total: $6.3 + 39.27 + 43.8 = 89.37$ af which rounds to **89.4 afa**.

G. NARRATIVE/REMARKS/COMMENTS

Field Report Narrative from 11/4/2004 completed by Jim Stanton, Sr Water Resource Agent:

"The field exam was conducted on 7-13-01. I was accompanied by L. M. Davenport, who was a partner in the facility at that time. Three connected wells with 5 hp motors and pumps provide water for 2 homes and an office, plus livestock, at a commercial feedlot. All 3 wells run at the same time as needed. The 2 east wells are covered by Rights 37-12778 & 12779 under SRBA decrees. Well #3 is covered by this permit. Well #4 has a 30 hp motor and pump that provide water for dust control at the corrals on the west side of the property, and is also under this permit; these corrals were not part of the original facility. There are 66 numbered corrals for cattle, plus a couple more for a few horses. Corrals #46-66 have sprinklers for dust control.

Wells #1 & 2 were measured at 0.08 cfs each, while Well #3 was measured at 0.10 cfs. Well #4 was measured at 0.61 cfs. So the total system capacity for stockwater and domestic uses is 0.26 cfs; the license should be conditioned with this limits for all rights combined for these uses.

According to Mr. Davenport, livestock numbers vary greatly at this facility over the course of a year and from one year to the next. The system was designed for up to about 7000 600-800 lb beef cattle; only 1000 were on site during my visit. The permit allows 5000 animals, and the decreed rights cover 2000 more based on the cfs rate.

The system described on the permit produces 0.10 cfs for stockwater and 0.61 cfs for industrial use (dust control). The flow rates and uses were switched on the permit, so I am recommending a licensing amendment to correct this obvious error. The total measured diversion rate for the 3 wells in the stockwater/domestic system is 0.26 cfs. Total capacity of the 4 wells is 0.87 cfs.

The maximum volume for dust control is 36.7 afa based on system operation as described by Davenport, whereas the actual usage recorded by WD 130 did not exceed 21.4 af for the years 2001 through 2003. This is about what Cindy estimated for 3 months of usage. I am recommending a 7-month use period, and Cindy felt comfortable with my recommendation for total volume. They are only going to use as much water as they need to maintain the environment at the feedlot, and it would not be fair to restrict them based on only 3 years of data.

As far as the volume for stockwater and domestic uses is concerned, I am recommending 64.3 afa (44.2 afa for stockwater under this permit). WD 130 records show about 83 afa used last year. Well #3 had a new or repaired meter, so there is some question as to the accuracy of the data. Well #3 showed 52.6 af by itself, with lesser amounts from the other wells. The 83 afa used by (presumably) 7000 animals equates to 10.6 gpm/hd/day, which is about the standard for animals 16-24 months old & 800-1200 lbs in weight. I was told that the feedlot catered to 600-800 lb animals, which drink 7.9 gpd/head on average. So the difference between the measured usage and what I recommended is apparently the size of the animals being raised. The original purpose of this facility was to raise beef heifers, but the new owner is raising larger replacement heifers for the large dairies that he also owns in WD 130. So the historic stockwater use has increased since proof was filed; I will make Cindy aware of this.

I am recommending a total usage volume for this facility of 101.0 afa. WD 130 records show 104 afa used last year, which is within standard meter accuracy of my findings. So this facility appears to be in compliance."

Jim Stanton completed the field exam, but never forwarded the permit for licensing.

After discussing the systems and water uses with the feedlot manager, Paul Matheson on 4/9/2019, he verified that the stockwater system and dust abatement system are completely separate diversion systems. Based on that information, the license has been split into 37-8685 (stockwater) and 37-23137 (commercial, formerly industrial). This license, 37-8685, will be amended to add the two wells under water rights 37-12778 & 37-12779 and add the SESE1/4 of Twp 06S, Rge 13E, Sec. 1, to license the stockwater system as developed under this water right. Additionally, a combined limit will be added to this right to limit total diversion to 0.26 cfs and total volume to 89.4 afa when all three rights are combined.

I am recommending a flow rate of 0.26 cfs for stockwater use, based on measurements reported in the WMIS database that were collected utilizing an ultrasonic flow meter. This is also the same flow rate that Jim Stanton recommended.

I'm recommending a volume of 89.4 afa annually for this system based on the annual volumes reported in the WMIS database for these three wells

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
STOCKWATER	01/01 to 12/31	0.26 CFS	89.4 AF

Totals: 0.26 CFS 89.4 AF

2. Recommended Amendments

 Change P.D. as reflected above X Add P.D. as reflected above None

 Change P.U. as reflected above X Add P.U. as reflected above None

I. AUTHENTICATION

William Mills - Water Resource Agent, Senior

Field Examiner's Name William Mills Date 4-22-2019

Reviewer _____ Date _____



Figure 1: Well #1 (37-12279 Domestic & Stockwater & 37-8685 Stockwater)



Figure 2: Well #2 (37-12278 Stockwater & 37-8685 Stockwater)



Figure 3: Well #3 (37-8685 Stockwater)



Figure 4: Corrals on west side of feedlot

System Diagram for Water Right 37-8685



DAIRIES: WATER USE WORKSHEET

REQUIRED DAIRY DATA

NUMBER OF MILKING CATTLE	0
NUMBER OF DRY CATTLE	0
NUMBER OF REPLACEMENT CATTLE: 0-2 MONTHS	0
3-4 MONTHS	0
5-8 MONTHS	0
9-12 MONTHS	4500
13-15 MONTHS	0
16-24 MONTHS	0
ENTER 1 FOR MANUAL COW WASHING, 2 FOR AUTOMATIC, OR 3 IF	
SPRINKLERS ARE USED TO FLUSH HOLDING PEN AND WASH COWS	0
IF SPRINKLERS ARE USED: NUMBER OF SPRINKLERS IN HOLDING PEN	0
NOZZLE DISCHARGE (USE 5.0 GPM IF UNKNOWN)	0.00
OPERATION TIME OF SPRINKLERS (MIN/DAY)	0
NUMBER OF MILKINGS PER DAY	0
AVG. LBS. OF MILK PRODUCED PER DAY PER ANIMAL (IDAHO AVG IS 70 LBS.)	0
HOURS PER DAY PUMP OPERATES FOR STOCKWATER USE	0.0
HOURS PER DAY PUMP OPERATES FOR COMMERCIAL USE	0.0
IS RECYCLED WATER USED TO FLUSH MILKHOUSE AND PARLOR FLOORS?	N
IS RECYCLED WATER USED TO WASH COWS?	N
IS A PLATE COOLER USED?	n
IS RECYCLED WATER USED FOR PLATE COOLER? (IF NO PLATE COOLER, LEAVE BLANK)	N
IF CORRAL MISTERS ARE USED: NUMBER OF MISTERS IN HOLDING PEN	
NOZZLE DISCHARGE (GPM)	
OPERATION TIME OF MISTERS (MIN/DAY)	
DAYS PER YEAR MISTERS ARE USED	

CALCULATIONS

DIVERSION RATE (CFS):

STOCKWATER

MILKING CATTLE (BASED ON MILK PRODUCTION)	####
DRY CATTLE @17.0 GPD/HD	####
REPLACEMENT CATTLE	####
TOTAL	####

COMMERCIAL

TOTAL	####
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TOTAL DIVERSION RATE -----

####

DIVERSION VOLUME (AFA):

STOCKWATER

MILKING CATTLE -----

0.0

DRY CATTLE -----

0.0

REPLACEMENT CATTLE -----

33.7

TOTAL -----

33.7

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400071

Well # 1
37-12779[Login](#)

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Report Year	Alternate	FM	PCC	Time Clock
2018		19.78		
2017		18.55		
2016		23.53		
2015		27.04		
2014		28.59		
2013		30.85		
2012		29.20		
2011		13.47		
2010		19.22		
2009		33.84		
2008		39.27		
2007		32.84		
2006		32.65		
2005		14.28		
2004		11.08		
2003		4.18		
2002		6.80		
2001		0.00		
2000		0.18		
1999				

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Well #2
37-12778[Login](#)[Point Of Diversion](#) [PCC](#) [Flow Meter](#) [Time Clock](#) [Alternate](#) [Contacts](#) [Data Summary](#) [Other](#) [Logout](#)**Data Summary**

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Report Year	Alternate	FM	PCC	Time Clock
2018		0.98		
2017				
2016				
2015		0.02		
2014		0.02		
2013		0.09		
2012		16.25		
2011		0.00		
2010		0.00		
2009		4.38		
2008		6.30		
2007		6.19		
2006		6.26		
2005		0.71		
2004		0.00		
2003		26.07		
2002		9.83		
2001		15.21		
2000		5.66		
1999				
1997				

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401690

37-8685
New Well / #3

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Report Year	Alternate	FM	PCC	Time Clock
2018				
2017				
2016				
2015				
2014				
2013				
2012				
2011		0.00		
2010		40.06		
2009		37.84		
2008		43.80	-	
2007		35.18		
2006				
2005				
2004		37.45		
2003		52.56		
2002				
2001		9.80		
2000		3.64		
1999				
1997				

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WMIS Volumes	401690	401696	400071	
2018		0.98	19.78	20.76
2017			18.55	18.55
2016			23.53	23.53
2015		0.02	27.04	27.06
2014		0.02	28.59	28.61
2013		0.09	30.85	30.94
2012		16.25	29.2	45.45
2011	0	0	13.47	13.47
2010	40.06	0	19.22	59.28
2009	37.84	4.38	33.84	76.06
2008	43.8	6.3	39.27	89.37
2007	35.18	6.19	32.84	74.21
2006		6.26	32.65	38.91
2005		0.71	14.28	14.99
2004	37.45	0	11.08	48.53
2003	52.56	26.07	4.18	82.81
2002		9.83	6.8	16.63
2001	9.8	15.21	0	25.01
2000	3.64	5.66	0.18	9.48

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- middle well well #1
37-12279 D/S

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Flow Meter Calibrations

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Calibration Date/Time:		08/03/2018	Factor:		1.00
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:			Standard Meter Flow:		
Rate Unit:		GPM	Rate Unit:		GPM
Rate Multiplier:		1.0000	Pipe Material:		
Volume Multiplier:		1.0000	Outside Diameter (inches):		
Volume Unit:		GAL	Wall Thickness (inches):		
Location:			Downstream Distance (feet):		
Comments:			Upstream Distance (feet):		
			Calibration Confidence:		
Installed Meter Information:			Installation Date:		
Manufacturer:		MASTER	Serial Number:		17263238
Model Number:		Octave	Other Well:		
Meter Type:		ULTRASONIC			
Calibration Date/Time:		01/01/2016	Factor:		1.00
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:		0.00	Standard Meter Flow:		0.00
Rate Unit:		GPM	Rate Unit:		GPM
Rate Multiplier:		1.0000	Pipe Material:		
Volume Multiplier:		1000.0000	Outside Diameter (inches):		0.00
Volume Unit:		GAL	Wall Thickness (inches):		0.00
Location:			Downstream Distance (feet):		0.00
Comments:			Upstream Distance (feet):		0.00
serial number is on back side between wall. Must be a new meter because the numbers do not match.			Calibration Confidence:		
Installed Meter Information:			Installation Date:		
Manufacturer:		SIEMENS	Serial Number:		
Model Number:			Other Well:		
Meter Type:		MAGNETIC, FULL PROFILE			
Calibration Date/Time:		11/11/2011	Factor:		0.96
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:		17.94	Standard Meter Flow:		17.20
Rate Unit:		GPM	Rate Unit:		GPM
Rate Multiplier:		1.0000	Pipe Material:		CARBON STEEL

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Volume Multiplier:	100.0000	Outside Diameter (inches):	2.39
Volume Unit:	GAL	Wall Thickness (inches):	0.14
Location:		Downstream Distance (feet):	1.00
Comments:		Upstream Distance (feet):	1.00
This well is backup only. Measurement is so short because manager and I bypassed pressure switch to make well turn on. Flowmeter is in Yellow shed just north of well.		Calibration Confidence:	GOOD
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	
Model Number:		Serial Number:	69139361
Meter Type:	IMPELLER	Other Well:	
Calibration Date/Time: 09/28/2006 Factor: 1.18			
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	24.50	Standard Meter Flow:	28.80
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL
Volume Multiplier:	100.0000	Outside Diameter (inches):	2.43
Volume Unit:	GAL	Wall Thickness (inches):	0.16
Location:	GOOD	Downstream Distance (feet):	2.00
Comments:		Upstream Distance (feet):	2.00
3 wells on feed lot, this is the middle one.		Calibration Confidence:	POOR
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	
Model Number:		Serial Number:	2738625
Meter Type:	IMPELLER	Other Well:	
Calibration Date/Time: 10/04/2000 Factor: 1.00			
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	1.00	Standard Meter Flow:	1.00
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	
Volume Multiplier:	100.0000	Outside Diameter (inches):	
Volume Unit:	GAL	Wall Thickness (inches):	
Location:	FAIR	Downstream Distance (feet):	
Comments:		Upstream Distance (feet):	
calibration not complete		Calibration Confidence:	EXCL
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	08/15/2000
Model Number:		Serial Number:	2738625
Meter Type:	PROPELLER	Other Well:	

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Calibration Date/Time:	08/03/2018	Factor:	1.00
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:		Standard Meter Flow:	
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	
Volume Multiplier:	1.0000	Outside Diameter (inches):	
Volume Unit:	GAL	Wall Thickness (inches):	
Location:		Downstream Distance (feet):	
Comments:		Upstream Distance (feet):	
		Calibration Confidence:	
Installed Meter Information:		Installation Date:	
Manufacturer:	MASTER	Serial Number:	17268870
Model Number:	Octave	Other Well:	
Meter Type:	ULTRASONIC		
Calibration Date/Time:	09/28/2006	Factor:	1.26
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	70.50	Standard Meter Flow:	88.50
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL
Volume Multiplier:	100.0000	Outside Diameter (inches):	2.75
Volume Unit:	GAL	Wall Thickness (inches):	0.16
Location:	GOOD	Downstream Distance (feet):	1.00
Comments:		Upstream Distance (feet):	1.00
3 wells on this feedlot. Runs smooth but is way off. The well is in a pit w/o lid.		Calibration Confidence:	POOR
Installed Meter Information:		Installation Date:	
Manufacturer:	MASTER	Serial Number:	2756642
Model Number:		Other Well:	
Meter Type:	IMPELLER		
Calibration Date/Time:	01/01/2004	Factor:	1.00
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	1.00	Standard Meter Flow:	1.00
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL

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Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL
Volume Multiplier:	100.0000	Outside Diameter (inches):	2.50
Volume Unit:	GAL	Wall Thickness (inches):	0.09
Location:	EXCL	Downstream Distance (feet):	0.50
Comments:	New well located 30' north of bully barn. Meter is in bully barn. Variable frequency drive box. -- (added serial no., corrected vol multiplier to gal X100. cy.)	Upstream Distance (feet):	0.50
Installed Meter Information:		Calibration Confidence:	FAIR
Manufacturer:	MASTER	Installation Date:	
Model Number:		Serial Number:	4743979
Meter Type:	PROPELLER	Other Well:	

Calibration Date/Time:	10/04/2000	Factor:	0.94
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	43.40	Standard Meter Flow:	41.00
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL
Volume Multiplier:	100.0000	Outside Diameter (inches):	1.92
Volume Unit:	GAL	Wall Thickness (inches):	0.14
Location:	FAIR	Downstream Distance (feet):	0.50
Comments:		Upstream Distance (feet):	1.00
		Calibration Confidence:	FAIR
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	08/15/2000
Model Number:		Serial Number:	2773759
Meter Type:	IMPELLER	Other Well:	

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Well #2

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Flow Meter Calibrations

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Calibration Date/Time:		07/24/2017	Factor:		1.00
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:	19.00		Standard Meter Flow:	19.00	
Rate Unit:	GPM		Rate Unit:	GPM	
Rate Multiplier:	1.0000		Pipe Material:		
Volume Multiplier:	1.0000		Outside Diameter (inches):		
Volume Unit:	GAL		Wall Thickness (inches):		
Location:			Downstream Distance (feet):		
Comments:			Upstream Distance (feet):		
Not a very good reading with fuji. Use factor of 1			Calibration Confidence:	EXCL	
Installed Meter Information:			Installation Date:		
Manufacturer:	MASTER		Serial Number:	12505625	
Model Number:	Octave c750		Other Well:		
Meter Type:	NONE				
Calibration Date/Time:		11/01/2011	Factor:		0.97
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:	11.23		Standard Meter Flow:	10.94	
Rate Unit:	GPM		Rate Unit:	GPM	
Rate Multiplier:	1.0000		Pipe Material:	CARBON STEEL	
Volume Multiplier:	1.0000		Outside Diameter (inches):	2.39	
Volume Unit:	GAL		Wall Thickness (inches):	0.14	
Location:			Downstream Distance (feet):	1.00	
Comments:			Upstream Distance (feet):	1.00	
Flowmeter is new this yearper manager, flowmeter is in new tan shed.			Calibration Confidence:	GOOD	
There are two well son the Si-Ellen side of the fence. The south of the two wells is abandoned and filled. Flowmeter monitors new well just north of shed.					
Installed Meter Information:			Installation Date:		
Manufacturer:	MASTER		Serial Number:	12505625	
Model Number:	Octave c750		Other Well:		
Meter Type:	NONE				
Calibration Date/Time:		12/16/2008	Factor:		1.08
Installed Meter Data:			Standard Meter Data:		
Installed Meter Flow:	34.30		Standard Meter Flow:	36.90	

Field Exam 37-8685

Volume Multiplier:	100.0000	Outside Diameter (inches):	2.40
Volume Unit:	GAL	Wall Thickness (inches):	0.15
Location:	FAIR	Downstream Distance (feet):	2.00
Comments:		Upstream Distance (feet):	2.00
NEEDS TEST! meter moved to a new well		Calibration Confidence:	EXCL
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	06/01/2003
Model Number:		Serial Number:	2756642
Meter Type:	IMPELLER	Other Well:	

Calibration Date/Time:	10/04/2000	Factor:	1.02
Installed Meter Data:		Standard Meter Data:	
Installed Meter Flow:	50.00	Standard Meter Flow:	51.00
Rate Unit:	GPM	Rate Unit:	GPM
Rate Multiplier:	1.0000	Pipe Material:	STEEL
Volume Multiplier:	100.0000	Outside Diameter (inches):	2.40
Volume Unit:	GAL	Wall Thickness (inches):	0.15
Location:	FAIR	Downstream Distance (feet):	2.00
Comments:		Upstream Distance (feet):	2.00
primary well		Calibration Confidence:	EXCL
Installed Meter Information:			
Manufacturer:	MASTER	Installation Date:	08/01/2000
Model Number:		Serial Number:	2756647
Meter Type:	IMPELLER	Other Well:	

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

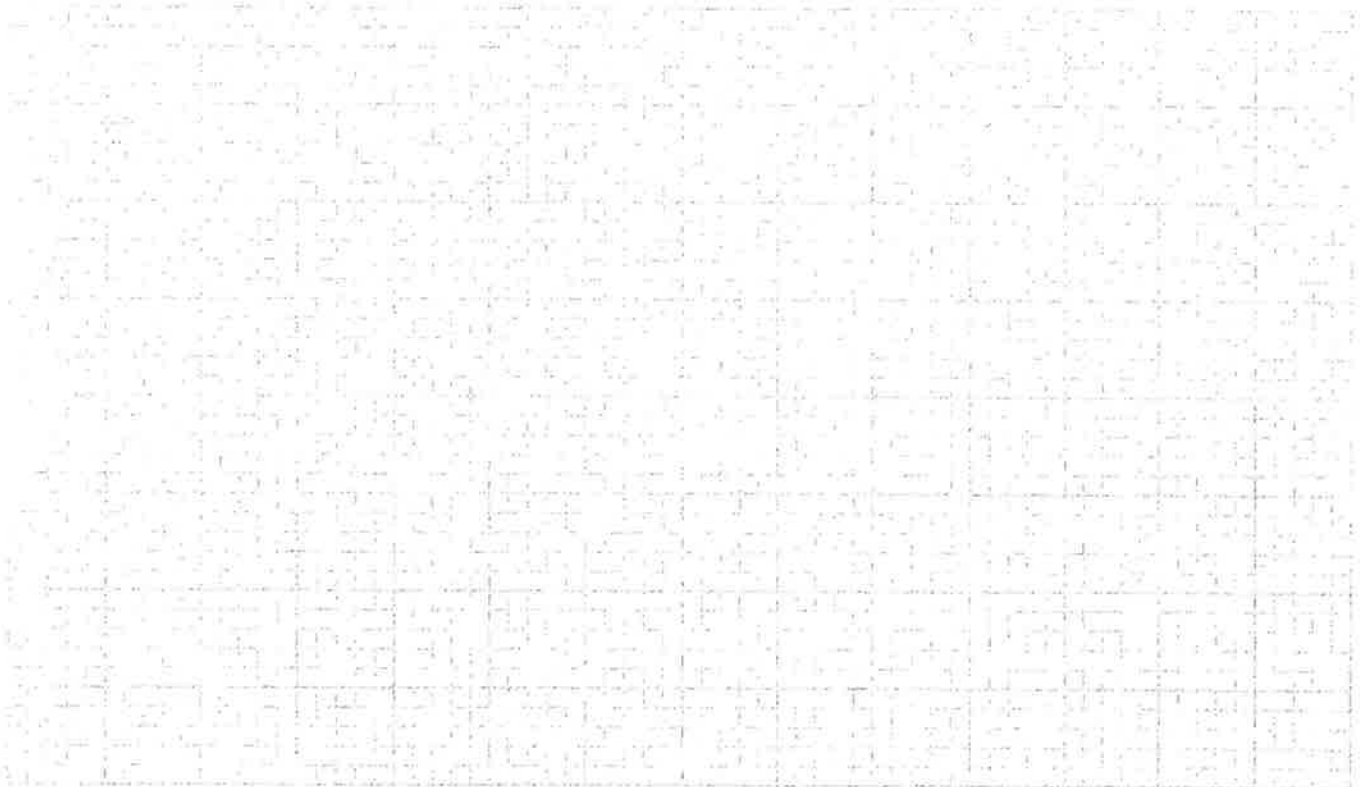
- Permit No. 37-8685
1. Owner: ~~Los Caballeros Ltd.~~ Roth Family Limited Partnership Phone No. ~~867-5609 ext 11~~
Current Address: ~~c/o L.M. Davenport~~ 17400 NE 88th St 934-5609 office
2. Accompanied by: L.M. Davenport Vancouver, WA 98682 EXAM. DATE: 7-13-01
Address: 1737 E 1800 S, Gooding, ID 83330 Phone No. _____
Relationship to Permit Holder: ~~partner~~ former partner
3. Source: Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: 37-12778, 12779
_____ ☒ Copies Attached
2. Other water rights with same point of diversion: _____
_____ ☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☒ Alternative diagram attached



Scale: 1" = _____

- ☒ Copy of U.S.G.S. 615 Quadrangle Attached ☒ Aerial Photo Attached
Showing location(s) of point(s) of diversion and (required for irrigation of 10 acres or more).
place(s) of use (required).
☒ Photo of Diversion and System Attached
(required for all but single household domestic groundwater, and stockwater.

System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

3 connected wells w/ 5 hp motors & pumps provide water for 2 homes, office (attached to east home). All 3 wells run at same time when needed. Separate well, motor & 30 hp pump runs sprinklers for dust control on new corrals on west part of property (none in SE/SE Sec. 1). The 2 new pumps were in same well house, but big pump was moved further north due to operational problems. The 3 small wells work together to serve existing & new corrals on this property. The 2 "new" wells were covered by this permit, the "old" wells by SRBA decrees. There 66 numbered corrals for cattle, plus a couple more for a few horses. Corral #46-66 are new under this permit, & have ☐ See Remarks on page 4 for continuation sprinklers for dust control.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
See field notes					

*Code to correspond with No. on map and aerial photo

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
394		SE	SW	SE	1	6S	13E	Gooding	GIS map - 2 new wells
192		SE	SE	SE	"	"	"	"	2 old wells

6. **Place(s) of Use:**

Indicate Method of Determination

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
6S	13E	1												S			S	S	
														I			I		

Do not use this space

D. FLOW MEASUREMENTS

☒ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
See field notes						

2. Measurements:

Well #1 = 100 gal / 178.7 sec = 34 gpm = 0.08 cfs
 Well #2 = 100 gal / 34 gal / 60 sec = 34 gpm = 0.08 cfs
 Well #3 = 100 gal / 126 sec = 47 gpm = 0.10 cfs
 Well #4 = 0.005 AF / 354.4 sec = 276 gpm = 0.61 cfs

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

1. Measured Method:

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)

Total Head: (1) + (2) = _____ (3); Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N / _____ T = _____ (6)

Meter Input HP: (6) x 1.34 = _____ (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5) / (7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

2. Volume Calculations for Other Uses:

Stock - 5000 hd x 7.9 gal/day/hd x 365 days/yr ÷ 325851 gal/AF = 44.2 AFA

Industrial - 13 sets x 6 min/set x 276 gpm x 3 ^{times} / day x 185 days/yr = 36.7 AFA

H. REMARKS AND OVERLAP REVIEW ANALYSIS

Stock numbers vary greatly, but system capacity is about 7000 600-800 lb animals according to owner. He said that there were about 1000 animals there now. Permit allows 5000 animals. SARA claims cover 2000 more based on cfs rate. The system described for dust control on the application produces 0.61 cfs, so I am recommending this amount.

The system described for stockwater produces 0.10 cfs, so I am recommending this amount.

The flow rates & uses were switched on the application, so I am trying to correct this in the licensing process. Domestic uses

Not to exceed 0.26 cfs for stockwater for all rights combined at this facility.

Not to exceed 6.9 AFA for stockwater for all rights combined at this facility.

Recommended industrial volume represents maximum usage; actual usage could be

I. RECOMMENDATIONS less depending on weather conditions.

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Stockwater	1-1	12-31	0.10	44.2
Industrial	5-1	11-1	0.61	36.7
(Dust Control)				
Totals:			0.71	80.9

2. Recommended Amendments

☐ Change P.D. as reflected above

☒ Add P.D. as reflected above

☐ None

☒ Change P.U. as reflected above

☐ Add P.U. as reflected above

☐ Other

J. AUTHENTICATION

Field Examiner's Name J E Stanton

Signature J E Stanton

Certification Date _____

Field Report Preparation Date 7-24-01

CONSULTANT SEAL

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

MEMORANDUM

November 04, 2004

Water Right: 37-8685

Author: jstanton

Subject: Field Report Narrative

The field exam was conducted on 7-13-01. I was accompanied by L. M. Davenport, who was a partner in the facility at that time. Three connected wells with 5 hp motors and pumps provide water for 2 homes and an office, plus livestock, at a commercial feedlot. All 3 wells run at the same time as needed. The 2 east wells are covered by Rights 37-12778 & 12779 under SRBA decrees. Well #3 is covered by this permit. Well #4 has a 30 hp motor and pump that provide water for dust control at the corrals on the west side of the property, and is also under this permit; these corrals were not part of the original facility. There are 66 numbered corrals for cattle, plus a couple more for a few horses. Corrals #46-66 have sprinklers for dust control.

Wells #1 & 2 were measured at 0.08 cfs each, while Well #3 was measured at 0.10 cfs. Well #4 was measured at 0.61 cfs. So the total system capacity for stockwater and domestic uses is 0.26 cfs; the license should be conditioned with this limits for all rights combined for these uses.

According to Mr. Davenport, livestock numbers vary greatly at this facility over the course of a year and from one year to the next. The system was designed for up to about 7000 600-800 lb beef cattle; only 1000 were on site during my visit. The permit allows 5000 animals, and the decreed rights cover 2000 more based on the cfs rate.

The system described on the permit produces 0.10 cfs for stockwater and 0.61 cfs for industrial use (dust control). The flow rates and uses were switched on the permit, so I am recommending a licensing amendment to correct this obvious error. The total measured diversion rate for the 3 wells in the stockwater/domestic system is 0.26 cfs. Total capacity of the 4 wells is 0.87 cfs.

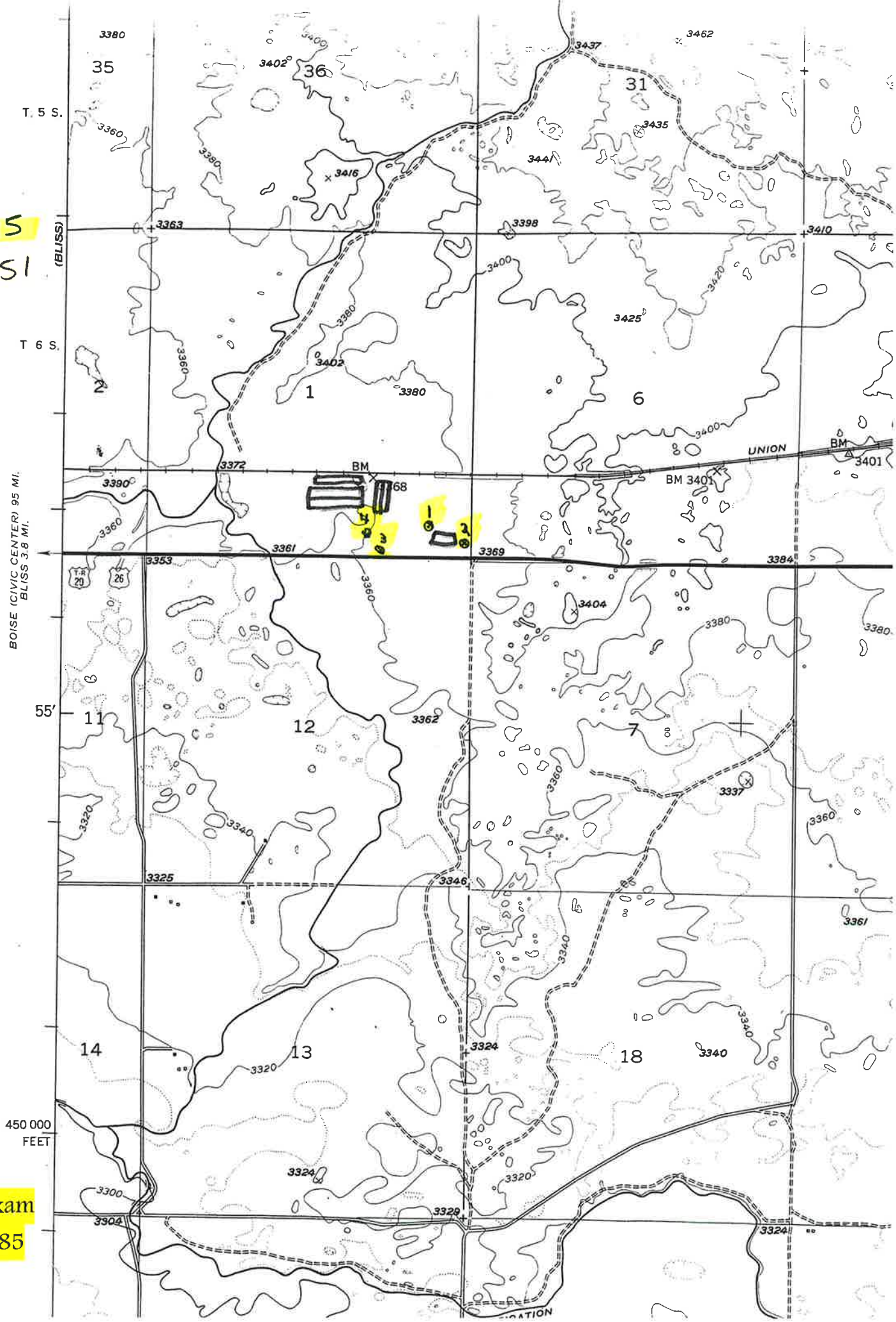
The maximum volume for dust control is 36.7 afa based on system operation as described by Davenport, whereas the actual usage recorded by WD 130 did not exceed 21.4 af for the years 2001 through 2003. This is about what Cindy estimated for 3 months of usage. I am recommending a 7-month use period, and Cindy felt comfortable with my recommendation for total volume. They are only going to use as much water as they need to maintain the environment at the feedlot, and it would not be fair to restrict them based on only 3 years of data.

As far as the volume for stockwater and domestic uses is concerned, I am recommending 64.3 afa (44.2 afa for stockwater under this permit). WD 130 records show about 83 afa used last year. Well #3 had a new or repaired meter, so there is some question as to the accuracy of the data. Well #3 showed 52.6 af by itself, with lesser amounts from the other wells. The 83 afa used by (presumably) 7000 animals equates to 10.6 gpm/hd/day, which is about the standard for animals 16-24 months old & 800-1200 lbs in

weight. I was told that the feedlot catered to 600-800 lb animals, which drink 7.9 gpd/head on average. So the difference between the measured usage and what I recommended is apparently the size of the animals being raised. The original purpose of this facility was to raise beef heifers, but the new owner is raising larger replacement heifers for the large dairies that he also owns in WD 130. So the historic stockwater use has increased since proof was filed; I will make Cindy aware of this.

I am recommending a total usage volume for this facility of 101.0 afa. WD 130 records show 104 afa used last year, which is within standard meter accuracy of my findings. So this facility appears to be in compliance.

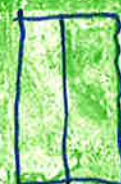
37-8685
6S-R13E-S1



Field Exam
37-8685

Field Exam 37-8685
T6S, R13E, Sec. 1

211
1112



4919
7-550



116
1217



Well #1, Well House (Looking North)



Flow Meter In Well House

37-8685

7-13-01

JE Stanton



Well #2 (looking SE)



Flow Meter Inside Well House

37-8685



Well #3



Pressure Tanks For Well #3, Controls For Wells 3 & 4

37-8685

7-13-01

JE Stanton



Cornfields w/Dust Control (Looking WNW From Well)



Closeup of Sprinkler

37-8685

7-13-01

JE Stanton



Sign at Facility Entrance (Looking East)



Well & Mainline for Dust Control (Looking West)

37-8685

7-13-01

JE Stanton